Oil and Gas Occupational Safety and Health Guidance Notes

April 1992

Canada

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GUIDANCE NOTES

for

THE CANADA LABOUR CODE

(PART II)

&

THE OIL AND GAS

OCCUPATIONAL SAFETY

AND HEALTH

REGULATIONS

NEB

April, 1992

Aussi disponible en français

FOREWORD

As a result of amendments to the *Canada Labour Code* that were proclaimed in 1986, occupational safety and health legislation in the federal jurisdiction is now consolidated in the *Canada Labour Code*. The occupational safety and health of workers employed in the exploration, development, production, processing, and transportation of oil and gas in areas subject to federal legislation, is now governed by regulations that were jointly developed by the departments of Energy Mines and Resources, Indian Affairs and Northern Development and Labour Canada (LC) under Part II (formerly Part IV) of the *Canada Labour Code*. The new regulations, titled *Oil and Gas Occupational Safety and Health Regulations* (the OGOSH Regulations), and *Safety and Health Committees and Representatives Regulations*, were proclaimed in October 1987 and March 1986, respectively. These two sets of regulations detail the measures and procedures that the petroleum exploration industry must follow to comply with the Canada Labour Code (Part II).

Please note that the National Energy Board is responsible for administering the federal Occupation Safety and Health Regulations (OSH) to certain interprovincial and international pipelines. The general OSH legislation applies to these activities but not the *Oil and Gas Occupational Safety and Health Regulations* which apply only to exploration and production activities in the field.

THESE GUIDANCE NOTES HAVE NO LEGAL FORCE AND ARE PREPARED SOLELY FOR THE ASSISTANCE OF OPERATORS. FOR CERTAINTY, THE OPERATOR MUST RELY ON THE ACTS AND REGULATIONS THAT APPLY TO HIS ACTIVITIES. A COMPLETE LIST OF THE ACTS, REGULATIONS, GUIDELINES, AND STANDARDS REFERENCED IN THE OIL AND GAS OCCUPATIONAL SAFETY AND HEALTH REGULATIONS, AND IN THESE GUIDANCE NOTES, IS CONTAINED IN APPENDIX A.

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GENERAL

1. Purpose of Document

The purpose of this document is to provide oil and gas operators, their employees and contractors on frontier lands outside of Accord areas, with information to assist them in meeting the requirements set out in Part II of the Canada Labour Code and the Regulations promulgated under this legislation.

2. Application

In general, Part II of the Labour Code applies to all employees and employers involved in the exploration, production or processing of oil and gas in areas subject to federal administration. This includes employees involved in any project approved under the Oil and Gas Production and Conservation Act such as oil and gas producution, seismic surveys, geotechnical programs and feasibility or research studies. Appendix G outlines the application and implementation of OSH for geophysical crews on seismic vessels. The responsibility for OSH in land-based permanent warehouses and supply bases is shared with the province or territory in which the facilities are located. Marine employees working on seismic vessels are excluded. The *Oil and Gas Occupational Safety and Health Regulations* apply to all personnel working on a Mobile Offshore Drilling Unit (MODU) while on location. Personnel on a MODU during transit or on standby or support vessels are covered by the Marine Occupational Safety and Health Regulations.

With respect to oil and gas activity, Part II of the Code now applies to the following areas:

a) Yukon Territory, Northwest Territories; and

b) all offshore areas except those offshore Nova Scotia and Newfoundland that are subject to a federal-provincial Accord.

3. Labour Canada and the National Energy Board

As a result of interdepartmental agreements, officials of NEB have been appointed as safety officers and regional safety officers by the Minister of Labour for the purpose of monitoring safety and health in the workplaces associated with petroleum exploration and production.

4. Informational Requirements

To satisfy the requirements set out in Part II of the Labour Code, the following information should be submitted by an operator applying to undertake any exploratory or production activity:

- safety and health committee composition (number of employee representatives; names and positions of the employer representatives; chairpersons);
- frequency of safety and health committee meetings;
- procedures in place for the protection of safety and health at the worksite;
- record keeping on accidents and injuries and health hazards at the worksite;
- a statement of the employer's general policy concerning the safety and health of employees at work;
- first aid facilities and medic qualifications;
- emergency response plans and medivac procedures;
- communication, life-saving and survival equipment;
- employee training for the handling and storage of all hazardous substances; and
- fire safety and other emergency measures available.

For the sake of convenience this information could be compiled into a safety manual for the use of the operator and a copy provided with the application for a project.

For offshore drilling operations, this information should be included in the application for Drilling Program Authorization (DPA). In cases where a DPA is not required, the information is to be included in the pertinent application for regulatory approval. This information is to be submitted to the appropriate NEB office with the application. Routine and priority reports are to be sent to the NEB office in Yellowknife which is also responsible for field inspections.

If some of the above mentioned information is not available at the time the application is made, then the applicant should simply state that safety committees will be set up at the workplace and the general composition and size of the committee should be indicated. The employer must assure NEB that an effective safety committee will be functioning during the course of an operation.

The addresses of the two NEB offices are:

NEB, Calgary
National Energy Board
311 - 6th Avenue S.W.
Calgary, Alberta
T2P 3H2

Telephone: (403) 299-2790 or (403) 292-4800
Fax: (403) 292-5876 or (403) 292-5503

NEB, Yellowknife
National Energy Board
Engineering Branch
Bag Service 4570
Yellowknife, NWT
X1A 2R3

Telephone: (403) 920-8175
Fax: (403) 873-8707

CANADA LABOUR CODE (PART II)

1. Purpose of Code

The purpose of Part II of the *Canada Labour Code* (Code) is "to prevent accidents and injury to health arising out of, linked with or occurring in the course of employment". The legislation ensures that workers and employers cooperate to prevent accidents and resolve safety and health problems.

2. Highlights of Code

The following are the highlights of the Code in point form.

a) The Code strengthens three fundamental rights of workers:

- the right to know;
- the right to participate;
- the right to refuse dangerous work.

This is set out in more detail in section 7 of these Guidance Notes.

b) The duties of employers and employees are laid out in the Code. In particular, the responsibility and accountability of all employers and employees are stressed in order to ensure a safe workplace.

c) The Code serves as a comprehensive occupational safety & health statute for employers under federal jurisdiction and provides rights and protection to all employees under federal jurisdiction.

d) The Code promotes voluntary compliance from employers and employees and co-operation between them to resolve workplace safety and health problems. In most workplaces, it is now mandatory to establish safety and health committees or representatives. (See section 8)

3. Definition of Employer

For the purposes of Part II and its pertinent regulations, the employer, in respect of a drill site, is generally considered to be the operator who normally has overall control of the site and activities. However, the drilling contractor who has the largest number of employees on site shares responsibility to ensure that OSH is implemented. Further, the various subcontractors also share responsibility for the safety and health of their employees depending upon the degree of control that the subcontractor has on the particular work place. For example, if employees of a subcontractor are working in a logging unit, where the operator or drilling contractor does not control activities, then that subcontractor has primary responsibility for the safety and health of these employees at that work place. A similar interpretation applies to employees engaged in well servicing, geophysical surveys and production operations.

4. Safety Policy

The safety policy of the employer shall be posted at the work site as provided under section 125(d) of the Code. A safety and health program is a definite plan of action designed to prevent accidents, injuries and occupational illnesses. The safety policy shall include to the extent required by law the firm intention of the company to:

- eliminate workplace hazards to the extent practicable;
- enforce safety rules; and
- train workers

5. Safety Officer

Some of the staff of the NEB have been appointed safety officers under Part II of the Labour Code and will be responsible for conducting the inspections necessary to ensure compliance with the Code and its regulations. Safety officers may assist the employer in formulating or implementing an effective safety and health program.

A safety officer (SO) may seek an Assurance of Voluntary Compliance (AVC) from an employer for minor infractions or other problems that do not give rise to a situation of immediate danger, and as long as there is agreement on how the problem will be resolved (see sample form in Appendix B). In more serious situations, the safety officer has the authority to issue a Direction. A Direction issued by a safety officer has the same legal force as a regulation. If an employer does not agree with the Direction, an appeal may be filed within fourteen days to the Regional Safety Officer. A sample format for a Direction issued by a SO is included in Appendix B. Safety officers are entitled to full cooperation from employees and employers. It is an offence to make a false or misleading statement to a safety officer.

6. Responsibilities of Employees

Under section 126 of the Code, the employee is responsible for taking all reasonable and necessary precautions to safeguard himself or herself and to maintain a safe workplace for his or her colleagues and any other persons affected by his or her work. The employee is required to comply with employer instructions and procedures concerning safety and health and with issued Directions. The employee is also responsible for reporting any hazards in the workplace to the employer and shall wear protective clothing and use safety devices as prescribed by the employer or a regulation.

7. Rights of Employees

Part II of the Canada Labour Code recognizes three basic rights of employees:

a) the right to know;

b) the right to participate;

c) the right to refuse dangerous work.

a) ***The right to know***

Through the provisions of the legislation, employees have the right to know about known or foreseeable hazards in the work place and to be provided with information, instruction, training and supervision necessary to protect their safety and health.

b) ***The right to participate***

Through representation on the safety and health committee or through the safety and health representative, employees participate in identifying job related safety and health problems and become involved in implementing the safety and health policy of their company.

c) ***The right to refuse dangerous work***

The right to refuse provision allows an employee to refuse to work if there is reasonable cause to believe that something connected with the job may be dangerous to the employee or a co-worker. In such a situation, an employee should not fear any disciplinary action from an employer provided the procedures outlined in the Code for a refusal are followed. A person refusing to work under these circumstances is required to report the circumstances to the safety and health committee and to his or her supervisor. The incident will then be investigated by the supervisor, or other employer representative, in the presence of the person who refused to work and a safety committee member who is not a member of management. An employee committee member who is involved in any such incident has a dual responsibility. Table 1 outlines the procedures to be undertaken in refusal of dangerous work situations.

Notwithstanding the preceding, the Code provides that the person in charge (master) of a ship or MODU in transit having regard to the safe operation of the vessel has the authority to require the work under protest to be continued. This suspension of the right to refuse dangerous work applies only while the vessel is underway.

TABLE 1

REFUSAL TO WORK – PROCEDURES

INTRODUCTION	After an employee determines that there is danger, certain steps must be followed.

STEP	RESPONSIBLE	PROCEDURE
1	Employee	• reports refusal immediately to: – supervisor – safety and health representative/ committee member
2	Employer	• investigates in presence of: – employee – safety and health representative/ committee member – if there is no representative, then one person chosen by employee
3	Employer	• decides: – no danger exists or – takes corrective action
4	Employee	• if still believes that dangerous situation exists, continues to refuse to work
5	Employer & Employee	• must contact safety officer, and request investigation

TABLE 1 *(Continued)*

REFUSAL TO WORK INVESTIGATION - SAFETY OFFICER

INTRODUCTION	Just before, during, and after the investigation by the safety officer, all concerned parties have certain duties as described below.

STEP	RESPONSIBLE	PROCEDURE
1	Employer	• may require employee to stay in safe place near investigation or • may assign employee to alternate work • shall not assign disputed work to another employee unless that employee is informed of initial refusal
2	Safety Officer (SO)	• investigates in presence of employer and employee (or his representative) • informs employer and employee of decision

IF...	THEN...
SO decides danger exists	• SO issues Direction to correct situation • employee may continue to refuse until situation is corrected
SO decides no danger exists	• employee returns to work but may submit written request to SO within 7 days that matter be referred to Canada Labour Relations Board

3	Canada Labour Relations Board	• may confirm the decision that no danger exists OR • issue a Direction for corrective action

An employee may not refuse to work under Part II if:

i) the employee's refusal puts the life, health or safety of another person directly in danger; or

ii) the perceived danger is inherent in the employee's work or is a normal condition of employment.

8. Safety and Health Committees

A safety and health committee may be formed at any workplace having five or more employees. However, the Canada Labour Code requires that safety committees **be** set up for worksites having more than **twenty** employees. The safety committee's responsibility is to advise the employer on safe work practices and to provide employees with leadership in protecting the safety and health of all. Although the committee consists of employer and employee representatives who may be directly involved in operations, the committee itself is only an advisory body and cannot direct management to carry out its recommendations. It is however the prime forum for communication and exchange of information on safety and health matters between employers and employees.

The Canada Labour Code and the Safety and Health Committees and Representatives Regulations set out the powers of a safety committee. The committee should assist the employer and employees in resolving safety and health concerns reasonably and with minimum intervention from outside agencies.

The size of the committee should be based on the number of employees at the worksite and the degree of hazard in the workplace. For oil and gas drilling operations, it is preferable that one employee member from each of the various major subcontractors (diving, catering, marine, drill crew, etc.) involved in the drilling program be elected to the committee. In order to increase the effectiveness of the committee, employer members should have the authority to take action. Toolpushers, rig superintendents, rig managers and safety supervisors, should all be considered as possible employer members.

The employer's representative at the workplace should inform safety committees of matters relating to safety and health and take all practicable steps to give effect to recommendations of the safety committee.

Safety committees should meet at least once a month. Although the periodic meeting is a major event in the safety program, it should not be the only time when members concern themselves with the program, nor should all safety-related problems and complaints be held over to await resolution at the next meeting. One or more representatives chosen by the committee should be involved in the following activities outside the regular meetings:

- workplace inspections;
- investigation of accidents;

- investigation of complaints;
- investigation of cases of refusal to work because of hazards; and
- development of programs for the prevention of occupational injury and illness.

Certain committee members should be involved in investigations and inquiries concerning safety and health either as observers or as active investigators. In cases of serious accidents, the committee may decide to carry out its own investigation or to follow up on investigations made by other people. Any employer member receiving complaints as a committee member is obligated to respond to the complaint in a responsible manner and to report on it to the committee.

The Code has made provision for the granting of an exemption from the safety and health committee requirements where the nature of work being performed in a given work place is relatively free from risks to safety and health. Requests for such exemptions will be evaluated by the NEB and may be granted for a maximum three year period.

9. Safety and Health Committee Meetings

The minutes of a safety meeting provide a permanent record of the matters discussed and the decisions reached. The minutes should be signed by both chairpersons and then distributed to the members and posted for the information of employees for at least one month. Minutes of all meetings should be retained on file at the site. For northern activities copies of the minutes should be sent to the NEB regional office in Yellowknife after every meeting. For areas on the east and west coast the minutes should be sent to the Calgary office. LC safety officers may exempt operators from the requirement to submit minutes if an inspection shows that the safety and health committee is functioning properly.

In addition to the regular safety meeting, a committee may wish to hold periodic general meetings for purposes of information and discussion. The committee can use these meetings to report to the employees and to invite their comments and evaluation of the committee's performance.

As per the Safety and Health Committees and Representatives Regulations, the chairman of the safety and health committee selected by the employer (operator) is required to submit an annual report to the NEB regional office on the committee's activities. This report is required by March 1 of each year and should be in a form set out in Appendix B. ALL OPERATORS ON FRONTIER LANDS SHOULD ENSURE THIS IS DONE.

10. Safety and Health Representative

For those worksites where there are more than four but less than twenty employees, a safety and health representative is to be selected by the employees if a safety and health committee has not been formed. Some onshore seismic operations and well servicing operations may satisfy the regulations with a representative rather than a committee. However, the representative must be selected from those employees who do not exercise managerial functions.

OIL AND GAS OCCUPATIONAL SAFETY AND HEALTH REGULATIONS

The following guidance notes, identified by section, supplement the OGOSH Regulations.

1. **Floor and Wall Openings** (Section 3.3)

Prior to commencing rig-up operations, the employer shall plan the arrangement of all equipment to minimize hazardous conditions and to ensure that operations can be conducted safely. During rig-up, the rotary table opening in the floor shall be covered or flagged as appropriate until the rotary table is ready to be moved into place.

2. **Guardrails** (Section 3.3(5))

It should be noted that this section makes guardrails or chains mandatory at many locations on a drilling rig, frequently including the rig floor and mud tanks access. At locations such as the monkeyboard where an all-round guardrail is not practical, the employee must wear a safety harness and line.

3. **Overhead Tools** (Section 3.11)

Tools, spare parts or other loose material shall be in the derrick or mast only when required for immediate use. Employees shall not be working on the rig floor while repairs are being performed in the derrick unless all tools used for repair and objects being repaired are fastened by a safety device to prevent falling.

4. **Housekeeping** (Section 3.12)

Particular care must be taken by operators of drilling rigs to comply with this section of the Regulations. Spills of mud, oil or other fluids on a drill floor and other work areas must be removed promptly. Slipping hazards are a major concern and preventive measures such as the installation of metal grating or the use of sawdust should be considered.

Tools, spares and other loose equipment should be arranged and stored to minimize tripping hazards.

5. **Safety Nets** (Section 4.14)

Nets that show wear, damage or deterioration that substantially affects their strength should be immediately removed from service for complete inspection and repair or disposal. Factors such as sunlight, abrasion, sand, rust and contaminants may lead to a decreased net life.

6. **Elevating Device** (Section 5.1 & 5.2)

Every elevating device shall be properly maintained. The most recent records of maintenance and of the checks required by this section should be kept at the work site.

An elevating device should not be used under weather, sea and other conditions likely to endanger any person, vessel or offshore installation.

The operation of raising, suspending, supporting or lowering of personnel baskets should be supervised by a competent person who should at all times have a clear unrestricted view of the operation. Personnel baskets should be load tested annually. The requirement for the donning of a life jacket or PFD when being transferred does not apply in northern offshore areas where personnel are being transferred over ice.

7. Boiler and Pressure Vessels (Section 6.4)

An inspection by a licensed inspector is required for a newly manufactured pressure vessel or where any repair or modification may affect the integrity of a pressurized system. Start-up inspections and inspections made after minor repairs can be carried out by a qualified person. Any unusual loss of pressure particularly in compressed air systems should be investigated. The most recent records of all repairs, modifications and inspections should be kept at the worksite.

On offshore seismic operations where airguns are the energy source, these guns are a particular hazard. The release of air under high pressure can tear flesh and force dust, water, oil or other particles through the skin and into the blood stream. A resulting embolism could be fatal.

8. Lighting Requirements (Section 7.4)

The illumination requirements of this section represent the minimum acceptable level of lighting and are based on average values. Lighting should be installed and arranged so as to minimize glare and shadows.

9. Electrical Safety (Part IX)

Every attempt should be made to isolate or lock out live electrical equipment. When this is not possible, then the employer should develop appropriate safety procedures for working on live electrical equipment which may include the use of a safety watcher. Employees should be trained and thoroughly familiar with these procedures.

10. Sound (Section 8.2)

If a hearing protector is required at a worksite, the proper fitting technique should be demonstrated and the wearer should be instructed in its use by a person who is competent. Employees should also be instructed on how to recognize when a hearing protector requires repair, replacement or is defective and they should not be encouraged to alter or attempt to repair it themselves.

In addition to considering sound level hazards, the employer should take care not to expose workers to unnecessary or harmful vibrations. In this regard, the employer is encouraged to consult the international standards entitled *"Evaluation of Human Exposure for Whole Body Vibration"* (IS0-2631), and *"Hand-Arm Vibrations"* (ISO-5349).

11. WHMIS (Part XI)

Part XI of the OSH regulations was amended in 1988 by the Workplace Hazardous Materials Information System (WHMIS) requirements. Appendix C provides a guideline that should be followed by employees and employers to ensure compliance with WHMIS.

12. Compressed Gas Cylinders (Part XI)

Cylinders shall not be stored in the vicinity of sources of heat, fire or electricity. Protective caps shall be placed over cylinder valves when the cylinder is not in use. Warning signs may be required in accordance with section 18(5) of the Regulations.

13. Hydrogen Sulphide (Section 11.19)

Hydrogen sulphide is the most toxic naturally-occurring gas that may be present at petroleum drilling or production sites. An employer undertaking drilling or production operations in hydrogen sulphide prone areas should ensure that all employees are instructed in proper safe work procedures if the hazard is encountered.

The employer must ensure that employees in hydrogen sulphide prone areas have received the appropriate Hydrogen Sulphide Alive and/or Rescue courses provided through industry/government approved training facilities.

Employers should provide a monitoring program for areas that may be exposed to hydrogen sulphide. The monitoring program should include the use of detector tubes, an automatic environmental monitoring system or other equally effective means. The areas monitored should include the substructure, drill floor, the shale shaker and the mud settling tanks.

14. Explosives (Section 11.10, 11.26 and 11.27)

Explosives should be checked by a competent person at regular intervals for deterioration. Explosives that have deteriorated should not be used. For seismic operations, only sufficient explosives and caps for that day's operation should be transported to the field or site of the operation. At the end of the day's operation, the driller is responsible for ensuring that any remaining explosives and caps are safely stored.

15. Confined Spaces (Section 12.2)

Before working in a confined space, this section of the Regulations places a responsibility on both the employer and employee to ensure safety. The employer is to make an evaluation of known and potential hazards. Procedures to deal with and monitor these hazards during the course of the work must be developed. Protective clothing, breathing apparatus, detectors, mechanical resuscitation equipment and other safety and rescue equipment need to be incorporated in the plan. These procedures should be carefully reviewed by the employees required to enter the

confined space. The employer shall limit access to confined spaces and should post warning signs. Employers are encouraged to consult with the Canadian Petroleum Association (CPA) guideline entitled "Entry into Confined Spaces" which provides assistance in the recognition, evaluation, and control of dangerous or unhealthy atmospheres in confined spaces.

With regard to section 12.3(c) of the regulations, the employer should assess the usefulness of the life line when allowing personnel to enter a confined space. The life line should not be used if it is thought to create a greater hazard to the employee.

16. **Personnel Protective Equipment** (Part XIII)

An effective Personnel Protective Equipment (PPE) program should be implemented at all worksites. PPE is intended to eliminate or minimize exposure or contact to hazardous physical or chemical agents. PPE should not be used when facing hazards greater than those for which it is designed. It should also be remembered that PPE can contribute to workplace accidents by encumbering the employee. The Canadian Centre for Occupational Health and Safety (CCOHS) has published a checklist to assist employers in developing such a program. The checklist is included in Appendix D.

In the case of a drilling rig, one of the areas with the greatest potential for exposure to toxic substances is around the mud mixing hopper. This mixing process can lead to high levels of airborne dust or liquid spills. PPE which may be required when handling fluids and chemicals includes gloves, aprons, safety goggles, chemical-resistant boots, and respirators. Eye wash equipment shall be readily available at work areas when hazardous chemicals are being used.

17. **Protective Headwear** (Section 13.4)

In accordance with CSA Standard Z 94-1-M1977, safety hats must provide sufficient protection for the heads of industrial workers from impact, penetration and electrical shock. Personnel on offshore units and on land based drilling rigs must wear protective hats identified as Class B in the Standard. Hats made of aluminium or other metal do not meet this Standard.

18. **Respiratory Protection** (Section 13.7)

The employer is reminded that all respiratory hazards in the workplace should be identified and evaluated, and respiratory protection may be required if measured concentrations of dangerous airborne substances exceed the values published in the latest edition of the document entitled "Threshold Limit Values and Biological Exposure Indices for 1986-1987". Employees are encouraged to consult with the CPA guideline entitled "Respiratory Protective Equipment" which is intended to provide assistance in the selection, maintenance and use of respiratory protective equipment. It is recommended that any person who has a beard, long sideburns or other facial hair of a length which interferes with the proper seal of the breathing apparatus, not be permitted on any drilling unit.

19. Skin Protection (Section 13.9)

Persons should wear suitable gloves when employed at places where they might be exposed to hand injuries from hot, corrosive or toxic substances, or frostbite. Employees should be made aware of the risk of dermatitis from the handling of oils, greases and cleaning fluids.

20. Safety Belt (Section 13.10)

A safety belt with life line is required whenever an employee is working over the open sea or in heights greater than 2.4 metres where adequate platforms with proper guardrails are not available. The climb assist device may qualify as a fall arrest device.

In the case of seismic vessels, safety belts and life lines will be required for personnel working on the back deck when sea conditions make it necessary.

21. Protection against Drowning (Section 13.12)

As stipulated in the MODU Standards(TP6472E Standards Respecting Mobile Offshore Drilling Units published by the Canadian Coast Guard), the drilling unit must have marine abandonment suits of a quantity equal to 200 per cent of normal crew complement, half of which are to be located in the accommodation area, with the remainder located at the lifeboat embarkation stations. NEB may approve the replacement of up to 1/2 of the 200 per cent requirement for marine abandonment suits with helicopter passenger suits. A work suit that allows considerable freedom of movement is to be worn by any worker whenever there is risk of his being washed overboard; this situation may arise in the moonpool area and decks of work boats. The Canadian General Standards Board has published the Marine Abandonment Immersion Suit Systems Standard (CGSB 65.16-M89) and the Marine Anti-Exposure Work Suit System Standard (CAN/CGSB 65.21-M89). These standards set out design and performance criteria for survival suit and working suit systems. Any new suits purchased by an employer are expected to comply with the pertinent standard. No person shall work alone in the moonpool area of a drilling unit or installation or where there is a danger of falling overboard.

The drilling unit must carry survival capsules or covered lifeboats installed and equipped according to Part X of the MODU Standards. In some circumstances, it may be necessary to install a heater in the escape capsules or lifeboats to ensure engine start up. A rescue basket is to be maintained on the drilling unit and drilling unit crews are to receive training in its use.

In the case of seismic vessels, life saving and retrieval devices for a man overboard are to be located on or near the back deck. These should include personal floatation devices, smoke flares, light beacons and a means of raising an alarm. The vessel should be fitted with a pick up (rescue) boat that can be quickly deployed.

22. Transportation by Helicopter (Part XIII)

Helicopter passengers travelling over open water are required to wear exposure suits that conform with the Helicopter Passenger Transportation Suit Systems Standard (CAN/CGSB 65.17-M88). It should be noted that the drilling unit must carry reserve suits sufficient for the passenger load of the largest helicopter used in the operation. During winter operations in the Arctic, all employees travelling on helicopters should wear acceptable Arctic clothing such as a parka, insulative footwear and mittens. Hearing protection and seat belts should be worn throughout the flight.

23. Machine Guards (Section 14.13)

All shafts, sprockets and gears should be guarded. Guards that are removed for maintenance work should be replaced before the machinery is put back into operation.

24. Wire Rope (Section 15.26)

Wire rope should be checked, depending on its service, according to an established maintenance program, for wear, corrosion, fatigue or kinks. Defective rope should be discarded. All rope and slings should be well lubricated. All wire rope slings should be stored on racks in a clean dry place. Slings should be properly assembled with mechanical connections.

25. Air Hoists (Section 15.34)

Employers should ensure that all personnel operating lifting or hoisting equipment are familiar with the operating procedures and are trained in the use of the equipment.

Drilling operations should be suspended during the hoisting of personnel on a belt into the derrick. Only tuggers with automatic brakes can be used to lift personnel. The equipment must be powered up and powered down. Tuggers for lifting personnel should be inspected on a regular basis. Riding belts should be subjected to a thorough visual examination to confirm the absence of any defect prior to use. The entire system should be load tested annually.

26. Cranes (Section 15.46)

One employee, who has received the appropriate instructions, should be designated to give signals to the crane operator.

27. Storage of Materials (Section 15.55)

Storage racks should be designed and installed to prevent drill collars, pipe and other tubular material from accidentally rolling off the rack.

28. Hazardous Occurrence Reporting and Investigation (Part XVI)

Any event that is injurious and all events that have a potentially severe injury or extensive damage associated with them, must be recorded. All such events should be investigated by competent people. The persons involved and their supervisors along with members of the safety and health committee have a part to play in the investigation. The safety and health committee should review reports of any investigations that occurred since their last meeting.

From a regulatory point of view, it is important that a standard accident investigation report, titled "Hazardous Occurrence Investigation Report" be used by all employers subject to the Oil and Gas Occupational Safety and Health Regulations in order to facilitate compilation of statistics on a national basis. (See Appendix B for sample form.) As per section 16.7 of the OSH regulations, the employer is required to submit an annual report of accidents by March 1st of each year. This report summarizes the incidence of hazardous occurrences including minor injuries, number of employees and total number of hours worked. The format for the report is also included in Appendix B. The employer should only complete the pertinent sections of this form (e.g. only office employees subject to oil and gas OSH should be included). Section 16.8 requires that records be retained for one year. However in the case of occupational diseases or hazards with potential long term effects such as exposure to carcinogens, records should be kept for 5 years or longer.

29. Medics (Part XVII)

The provision of medical services at a work place is the responsibility of the operators. The application for DPA is to include a statement by a qualified medical doctor that he has reviewed the qualifications of each medic and found them satisfactory. Operators should ensure that a consulting physician is available at all times for emergency contact as per Section 17(3) of the Oil and Gas Occupational Safety and Health Regulations. Consulting physicians should be familiar with oil field operations. For guidance on medic training and qualifications, operators should comply with the following recommendations:

a) ***Minimum Qualification***

- Registered Nurse qualification with minimum two years' experience with emphasis on clinical work in intensive care and/or emergency; or
- formal paramedic training at college level, with three years' clinical experience; or
- recent military paramedic qualification to grade VIB; and
- current registration with appropriate professional licensing authority;
- Advanced Cardiac Life Support (ACLS) and/or Basic Cardio-Pulmonary Resuscitation (CPR) Instructors Certificate; and
- experience with helicopter and fixed wing medivacs.

b) ***Specialized Training***

The following training may be appropriate according to specific employment, locale and risks:

- diving accident management, transfer procedures and physiology;
- hypothermia, near drowning;
- communicable disease control (including knowledge of socially transmitted diseases) and public health issues including food preparation and service;
- disaster planning;
- simple suturing, wound care;
- psychiatric, dental emergencies;
- sick parade management, common ailments;
- Restricted Radio Operators Licence.

30. First Aid (Part XVII)

Part XVII details the medical supplies required at the workplace. For offshore exploratory operations, the employer is to provide a medic/physician kit with the supplies outlined in Appendix II of the Standards Respecting Standby Vessels aboard the standby vessel. It is possible, depending on operator discretion, for the kit to be maintained on the MODU for transfer to the standby vessel with the medic/physician. A similar medic/physician kit should be maintained at shorebase for transport to the scene of an emergency. In the case of several operators using a common shorebase only one such kit is needed for common use by all operators.

31. Smoking (Section 18.4)

Smoking is prohibited in specified hazardous areas on a MODU or at a drill site where explosive gas-air mixtures are likely to exist. Smoking in the work place shall be restricted to specially designated areas. Designated smoking areas do not need to be provided with a ventilation system separated from the rest of the work place. It is expected that safety and health committees would be involved in deciding on the location of these areas. Smoking should not be permitted during helicopter flights.

32. Emergency Electrical Power (Section 18.7)

The drilling unit must have an auxiliary electrical supply capable of supplying eighteen hours of power to navigational, obstruction and aircraft warning lights, and the masthead. This power supply must be able to supply power to the marine radio for continuous reception on 156.8 MHz. These requirements are set out fully in Part V of the MODU Standards.

33. Emergency Procedures (Section 18.9)

Under section 18.9 of the OSH regulations, employers are required to prepare emergency procedures for specific situations. Guidelines for assisting employers in the compilation of the emergency procedures plan are included in Appendix E.

It is important that appropriate personnel aboard Mobile Offshore Drilling Units be fully prepared in the event of a medical emergency. Appendix F contains general policies, practices and training guidelines to ensure adequate medical preparedness in the case of medical emergencies.

Section 18.9(1(d)) requires employers to develop emergency procedures in the event of the failure of the lighting system. The intent of this section is for the employer to develop procedures to follow in the event of a lighting failure such as:

- identification of employees that should continue to work during emergency lighting;
- location of emergency muster stations;
- the locations of back-up equipment (electrical spares, flashlights, etc.).

34. Training (Sections 11.19, 14.11 and 18.13)

Training is an essential part of safety at the worksite. Employers are encouraged to have training programs for new employees and refresher courses for experienced personnel. An effective training program will enhance worker safety by teaching employees how to recognize hazards and the procedures or means to control or avoid them.

The training standards for all personnel on drilling units have been set out in the Qualifications, Safety Training and Certification document (QSTC) published by the Canadian Petroleum Association. This document sets out the training requirements and acceptable schools for every position on a MODU.

All persons regularly employed on an offshore installation who have not had an opportunity to be certified may start work but must be given special instructions specific to the installation and be placed in the care of the colleague who is certified. Such persons should be certified within ninety (90) days from the date of employment.

Personnel working on other offshore installation and seismic vessels must receive safety training appropriate for their duties. For example offshore survival training is necessary for anyone that travels offshore by helicopter on a regular basis.

35. Emergency Drills (Section 18.14)

All personnel on board any vessel engaged in offshore oil and gas exploration are to participate in the fire and abandonment drills, and visitors are to be instructed in fire/abandonment procedures and their assigned lifeboat stations upon arrival. Man overboard drills and other contingency plans are to be practised on a regular basis.

36. Support and Standby Craft (Section 18.15)

These craft are a normal component of evacuation plans for any worksite. In the case of an offshore operation, the Standards Respecting Standby Vessels (TP7920) have been developed in cooperation with the Canadian Coast Guard. When such a vessel is proposed to support a drilling or production operation, the Canadian Coast Guard will inspect it and issue a Letter of Compliance if it is suitably equipped.

37. Condition of Employees (Section 18.16)

This section states that the employees' ability to function should not be impaired as a result of illness, fatigue, alcohol, drugs or any other condition that may be hazardous to the safety or health of themselves or any other person in the workplace. Oil and gas operators should develop appropriate policies and procedures in response to this regulation. In this regard, the following recommendations and/or guidelines should be considered:

a) ***Substance Abuse***

i) Education of management and employees about the health and safety hazards of alcohol and drug use should be the cornerstone of any substance abuse program. Prevention through education and awareness will achieve a safer working environment than a random drug testing program, especially when job performance is adequately monitored.

ii) Each company should select the method of dealing with the problem of substance abuse that best fits its organization and operating philosophy. The CPA Health Committee is able to advise member companies on specifics associated with Employee Assistance Programs.

b) ***Medical Assessments***

Operating companies and contractors should establish and conduct effective medical assessment procedures. Considerations which should be addressed in these procedures are listed below:

i) All operators and contractors must define the working conditions and physical abilities expected of an employee in a particular class of work. Then, in collaboration with their medical officers or consultants, they should develop job-specific medical standards to determine an employee's fitness to work or to return to work.

ii) All operators and contractors should have a medical assessment policy for regular-rotation employees that provides for:

- pre-placement health assessments as described in point i) above.
- periodic health assessments during the course of their employment; and
- an assessment of the ability to return to work after a period of inactivity due to illness or injury.

iii) All operators and contractors will be responsible for assessing the health and abilities of employees before enroling them in a survival course.

The Offshore and Remote Medicine Committee has published guidelines with regards to the above mentioned items. It is suggested that operators contact the committee for further advice on these matters.

38. Working or Travelling on Ice

The employer should prepare a manual for his or her employees if they are required to travel or work on ice. The manual should apply to the employer's particular project and should include the proposed construction techniques, maintenance and verification schedules and procedures for safe travel over ice.

APPENDIX A

REFERENCE MATERIAL

The following is a list of Acts, Regulations, guidelines and standards referenced in the OSH Regulations and guidance notes.

ACTS

Canada Labour Code Part II (including WHMIS amendments)

Oil and Gas Production and Conservation Act

Hazardous Product Act

Explosives Act

Food and Drug Act

Pest Control Products Act

Atomic Energy Control Act

Transportation of Dangerous Goods

Hazardous Material Information Review Act

REGULATIONS

Oil and Gas Occupational Safety and Health Regulations

Safety and Health Committees and Representatives Regulations

Controlled Products Regulations

Marine Occupational Safety and Health Regulations

Aviation Occupational Safety and Health Regulations

STANDARDS

ACGIH	Manual of Analytical Methods Recommended for Sampling and Analysis of Atmospheric Contaminants	1958
ACGIH	Threshold Limit Values and Biological Exposure Indices for 1986-1987	
AHA	Standards and Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care	Jun. 1986
ANSI A10.11-1979	American National Standard for Safety Nets Used During Construction, Repair and Demolition Operations	Aug. 1979

ANSI SI.4-1983	Specification for Sound Level Meters	Feb. 1983
ANSI/ARI 1010-82	Standard for Drinking-Fountains and Self-Contained, Mechanically-Refrigerated Drinking-Water Coolers	1982
ANSI/ASME B15.1-1972	Safety Standard for Mechanical Power Transmission Apparatus	Jul. 1972
ANSI/ASME B20.1-1984	Safety Standards for Conveyors and Related Equipment	May 1984
ANSI/NFPA 77-1983	Recommended Practice on Static Electricity	1983
API SPEC 2C	API Specification for Offshore Cranes	Mar. 1983 as amended to May 1984
API RP 2D	API Recommended Practice for Operation and Maintenance of Offshore Cranes	Jun. 1984
API SPEC 8A	API Specification for Drilling and Production Hoisting Equipment	May 1985
API RP 8B	API Recommended Practice for Hoisting Tool Inspection and Maintenance Procedures	Apr. 1979
CCG TP 6472	Standards Respecting Mobile Offshore Drilling Units	Dec. 1985
CCG TP 7920	Standards Respecting Standby Vessels	Nov. 1987
CGSB 65-GP-11	Standard for Personal Buoyant Devices	Oct. 1972
CGSB/CAN-65.17-M88	Helicopter Passenger Transportation Suit Systems	1988
CGSB/CAN2-65.7-M80	Life Jackets, Inherently Buoyant Type	Apr. 1980
CRFA	Sanitation Code for Canada's Foodservices Industry (Section G)	Sep. 1984
CSA A14-M1979	Concrete Poles	Sep. 1979
CSA A394-M1984	Guide to Requirements for Relocatable Industrial Accommodation	Mar. 1984
CSA B75-1947	Code of Practice for the use and Care of Chains	May 1947
CSA B173.5-1979	Safety Requirements for the Use, Care and Protection of Abrasive Wheels	Feb. 1979
CSA B311-M1979	Safety Codes for Manlifts	Oct. 1979, supplement no.1 1984

CSA B352-M1980	Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial, and Mining Machines	Sep. 1980
CSA C22.1-1986	Safety Standards for Electrical Installations	Jan. 1986
CSA C22.2 No.71.1- M1985	Portable Electric Tools	Mar. 1985
CSA C22.2 No. 144-1977	Ground Fault Circuit Interrupters	Mar. 1977
CSA Z94.1-M1977	Industrial Protective Headwear	Apr. 1977, as amended to Sept. 1982
CSA Z94.2-M1984	Hearing Protectors	Jun. 1984
CSA Z94.3-M1982	Industrial Eye and Face Protectors	May 1982
CSA Z94.4-M1982	Selection, Care and Use of Respirators	May 1982, as amended to Sept. 1984
CSA Z114-M1977	Safety Code for the Woodworking Industry	Mar. 1977
CSA Z142-1976	Code for the Guarding of Punch Presses at Point of Operations	Feb. 1976
CSA Z195-M1984	Protective Footwear	Mar. 1984
CSA Z240.2.1-1979	Structural Requirements for Mobile Homes	Sept. 1979, as amended to Apr. 1984
CSA Z259.1-1976	Fall-Arresting Safety Belts and Lanyards for the Construction and Mining Industries	Nov. 1976, as amended to May 1979
CSA Z259.2-M1979	Fall-Arresting Devices, Personnel, Lowering Devices and Life Lines	Nov. 1979
CSA Z259.3-M1978	Lineman's Body Belt and Lineman's Safety Strap	Sept. 1978, as amended to Apr. 1981
CSA CAN3-B44-M85	Safety Codes for Elevators	Nov. 1985
CSA CAN3-B355-M81	Safety Code for Elevating Devices for the Handicapped	Apr. 1981
CSA CAN3-O15-M83	Wood Utility Poles and Reinforcing Studs	Jan. 1983
CSA CAN3-Z11-M81	Portable Ladders	Sep. 1981, as amended to Mar. 1983

CSA CAN3-Z62.1-M85	Chain Saws	Feb. 1985
CSA CAN3-Z166-1975	Explosives Actuated Fastening Tools	Jun. 1985
CSA CAN3-Z180.1-M85	Compressed Breathing Air and Systems	Dec. 1985
NHW	Bureau of Radiation and Medical Devices Safety Codes	
NHW	Guidelines for Canadian Drinking Water Quality	1978
NIOSH	Certified Equipment List as Oct.1,1984	Feb. 1985
NIOSH	Manual of Analytical Methods	Feb. 1984
NRC	Canadian Plumbing Code	1985, as amended to Jan. 1987
NRC	National Building Code of Canada	1985, as amended to Jan. 1987
NRC	National Fire Code of Canada	1985, as amended to Jan. 1987
NSC	Accident Prevention Manual for Industrial Operations, Engineering and Technology	1980
ULC CAN4-S508-M83	Rating and Fire Testing of Fire Extinguishers	Jul. 1986
	United States Federal Register vol.40, no. 33 Sep. 1975 as amended by vol. 41, no. 53 Mar. 1976	

List of Acronyms Used Above

ACGIH	American Conference of Governmental Industrial Hygienists
AHA	American Medical Association
ANSI	American National Standards Association
API	American Petroleum Institute
ARI	Air-Conditioning and Refrigeration Institute of United States
ASME	American Society of Mechanical Engineers
CCA	Consumer and Corporate Affairs (Canada)
CCG	Canadian Coast Guard
CGSB	Canadian General Standards Board
CRFA	Canadian Restaurant and Foodservices Association
CSA	Canadian Standards Association
LC	Labour Canada
NFPA	United States National Fire Prevention Association Inc.
NEB	National Energy Board
NHW	National Health and Welfare (Canada)
NIOSH	United States National Institute for Occupational Safety and Health
NRC	National Research Council of Canada
NSC	National Safety Council of United States
TC	Transport Canada

APPENDIX B

OSH FORMS

This appendix shows samples of the following forms required under the authority of the Canada Labour Code (Part II) and the Oil and Gas Occupational Safety and Health Regulations.

Assurance of Voluntary Compliance	B-2
Sample Direction Letter	B-3
Safety and Health Committee Report	B-4
Hazardous Occurrence Investigation Report	B-5
Employer's Annual Hazardous Occurrence Report	B-6

ASSURANCE OF VOLUNTARY COMPLIANCE

PROMESSE DE CONFORMITÉ VOLONTAIRE

☐ Employer's / de l'employeur ☐ Employee's / de l'employé(e)

Pursuant to the Canada Labour Code
Conformément au Code canadien du travail

Part IV
Partie IV

Name of Employer/Raison sociale de l'employeur:	Work Place/Lieu de travail:
Address/Adresse:	Address/Adresse:
Telephone No./N° de téléphone:	Date:

No./N°	Item/Sujet	Completion Date/ Date du redressement

I, the undersigned employer or employer's representative or employee, hereby

1. declare that I have read this document and understand what action is required;

2. agree to take such action and to have it completed on or before the completion date indicated above; and

3. agree to inform, in writing, the safety officer named below, within fourteen (14) days from the above completion date, that the remedial action has been taken.

Je, soussigné employeur ou représentant de l'employeur ou employé(e), par la présente

1. déclare avoir lu le présent document et comprend le redressement nécessaire;

2. suis d'accord à prendre les mesures nécessaires et m'assurer que le tout est terminé à la date du redressement indiquée plus haut ou avant;

3. suis d'accord à informer par écrit l'agent de sécurité nommé ci-dessous dans les quatorze (14) jours suivant la date du redressement indiquée ci-haut, que les mesures correctives ont été prises.

(please print/lettres moulées, s.v.p.)

(please print and sign/lettres moulées, s.v.p. et signature)

Received by: Safety Officer Reçue par: Agent de sécurité	☐ For the above employer/pour l'employeur nommé ci-haut ☐ Employee of the above employer/employé(e) de l'employeur nommé(e) ci-haut	
Department or Agency/Ministère ou agence		
Address/Adresse	Signature	
Telephone No./N° de téléphone	Title/Titre	Date

cc: ☐ Employer/Employee Employeur/Employé(e) ☐ Safety & Health Committee/Representative Comité de sécurité et d'hygiène/représentant

Lab/Trav 762 (5/87)

(Dangerous situation to be corrected immediately)

IN THE MATTER OF THE CANADA LABOUR CODE -
PART II (OCCUPATIONAL SAFETY AND HEALTH)

DIRECTION TO EMPLOYER UNDER SS.145(2)(a)

The undersigned Safety Officer, did, on the ____ day of _____ 19__, attend at the work place operated by _____, being an employer subject
(name of employer)
to the Canada Labour Code, Part II, at _____ the
(address of employer's work place)
said work place being sometimes known as
_____, and having conducted (insert common name by which work place is known)
certain examinations, tests, inquiries or inspections at the said work place; consider that the use or operation of a machine or thing described hereunder or that a condition exists in the said work place which constitutes a danger to an employee while at work

_____

_____

(here describe the facts which give rise to the opinion that there is a dangerous situation and describe the machine or thing the operation of which constitutes a danger or describe the condition which constitutes danger);

HEREBY DIRECTS the said employer pursuant to paragraph 145(2)(a) of the Canada Labour Code, Part II, to take measures immediately (1) for guarding the source of the danger, or (2) to protect any person from the danger;

(safety officer to choose one or both of above)

Issued at _____, this ____ day of _____ 19__.

_____
(Signature)
Safety Officer

To: The above described employer
(Legal name and address of employer)

Labour Canada / Travail Canada

SCHEDULE/ANNEXE
(SECTION 10/ARTICLE 10)

SAFETY AND HEALTH COMMITTEE REPORT

RAPPORT DU COMITE D'HYGIÈNE ET DE SECURITÉ

DEPARTMENT FILE NO. / N° DE DOSSIER DU MINISTÈRE

REGIONAL OFFICE/BUREAU RÉGIONAL

EMPLOYER IDENTIFICATION NUMBER/ NUMÉRO D'IDENTIFICATION DE L'EMPLOYEUR

EMPLOYER NAME AND MAILING ADDRESS / NOM ET ADRESSE POSTALE DE L EMPLOYEUR

POSTAL CODE /CODE POSTAL

COMMITTEE NAME/WORK PLACE/ADDRESS IF DIFFERENT FROM ABOVE / NOM DU COMITÉ/LIEU DE TRAVAIL/ADRESSE SI DIFFERENTE DE CI-HAUT

POSTAL CODE /CODE POSTAL

COMMITTEE EXEMPTION PURSUANT TO SUBSECTION 9(24) OF THE ACT / EXEMPTION DU COMITE EN VERTU DU PARAGRAPHE 9(24) DE LA LOI ☐ YES / OUI

NUMBER OF EMPLOYEES REPRESENTED BY COMMITTEE / NOMBRE D'EMPLOYÉS REPRÉSENTÉS PAR LE COMITÉ

NUMBER OF TRADE UNION EMPLOYEE COMMITTEE MEMBERS / NOMBRE DE MEMBRES REPRÉSENTANT LES EMPLOYÉS SYNDIQUÉS DANS LE COMITÉ

NUMBER OF NON TRADE UNION EMPLOYEE COMMITTEE MEMBERS / NOMBRE DE MEMBRES REPRÉSENTANT LES EMPLOYÉS NON SYNDIQUÉS DANS LE COMITÉ

NUMBER OF EMPLOYER COMMITTEE MEMBERS / NOMBRE DE MEMBRES REPRÉSENTANT L'EMPLOYEUR DANS LE COMITÉ

TOTAL COMMITTEE MEMBERSHIP / EFFECTIF TOTAL DU COMITÉ

CONTACT PERSON/ PERSONNE RESSOURCE

TRADE UNION/ NOM DU SYNDICAT

TELEPHONE NO / N° DE TÉLÉPHONE

	MONTH/MOIS	JAN / JANV	FEB / FÉV	MAR / MARS	APR / AVR	MAY / MAI	JUNE / JUIN	JULY / JUILL	AUG / AOÛT	SEPT	OCT	NOV	DEC / DÉC	TOTAL
MEETINGS / RÉUNIONS	REGULAR / ORDINAIRES													
	SPECIAL / SPÉCIALES													
COMPLAINTS / PLAINTES	RECEIVED / REÇUES													
	RESOLVED / RÉSOLUES													
	UNRESOLVED / NON RÉSOLUES													
REFUSAL TO WORK / REFUS DE TRAVAILLER	RECEIVED / REÇUS													
	RESOLVED / RÉSOLUS													
	UNRESOLVED / NON RÉSOLUS													
INQUIRIES & INVESTIGATIONS / ENQUÊTES ET INVESTIGATIONS														
PROGRAMS, MEASURES AND PROCEDURES MONITORED / PROGRAMMES, MESURES ET PROCÉDURES SURVEILLÉS														
SAFETY AND HEALTH HAZARDS IDENTIFIED / RISQUES À LA SANTÉ ET À LA SÉCURITÉ DÉCELÉS														
	RESOLVED / RÉSOLUS													
	UNRESOLVED / NON RÉSOLUS													
DISABLING INJURIES / BLESSURES ENTRAÎNANT UNE INVALIDITÉ														
MINOR INJURIES / BLESSURES LÉGÈRES														
TIME LOST DUE TO INJURIES / PERTE DE TEMPS DUE AUX BLESSURES														

PLEASE HIGHLIGHT ANY SPECIAL PROGRAMS, INQUIRIES, UNRESOLVED ISSUES OR OTHER POINTS SIGNIFICANT TO THE COMMITTEE THAT OCCURRED DURING THE PREVIOUS 12 MONTHS ENDING DECEMBER 31 (ATTACH SHEET FOR ADDITIONAL INFORMATION)

DÉCRIRE TOUS PROGRAMMES, ENQUÊTES, QUESTIONS NON RÉSOLUES OU AUTRES FAITS PARTICULIERS SOULEVÉS AU COURS DES 12 MOIS SE TERMINANT LE 31 DÉCEMBRE ET POUVANT AVOIR UNE CERTAINE IMPORTANCE POUR LE COMITÉ (JOINDRE UNE FEUILLE ADDITIONNELLE AU BESOIN)

	PLEASE PRINT NAME / EN LETTRES MOULÉES	SIGNATURE/SIGNATURE	DATE DATE
EMPLOYEE CHAIRMAN, PRESIDENT REPRESENTANT LES EMPLOYÉS			
EMPLOYER CHAIRMAN, PRESIDENT REPRESENTANT L'EMPLOYEUR			

Canada

LAB/T1-ax 499 (Rev. 2 88)

SCHEDULE I/ANNEXE I
(SUBSECTION 16.4(3))/PARAGRAPHE 16.4(3))

HAZARDOUS OCCURRENCE INVESTIGATION REPORT

RAPPORT D'ENQUÊTE DE SITUATION HASARDEUSE

TYPE OF OCCURRENCE/GENRE DE SITUATION

☐ Fire / Explosion / Incendie / Explosion ☐ Death / Décès

☐ Disabling Injury / Blessure entraînant une invalidité ☐ Emergency Procedure / Procédures d'urgence

☐ Other / Autre _____ Specify / Préciser

Employer ID No./N° de matricule de l'employeur

Employer Name and Mailing Address/Nom et adresse postale de l'employeur | Telephone Number/Numéro de téléphone | Operator / Exploitant

Supervisor's Name/Nom du surveillant

Witnesses/Témoins

Site of Hazardous Occurrence/Lieu de la situation hasardeuse | Weather/Conditions météorologiques

ID of Drilling Rig, Drilling Unit, Production Facility, or Support Craft / Identification de l'appareil de forage, installation de forage, installation de production ou du véhicule de service | Date and Time of Hazardous Occurrence / Date et heure de la situation hasardeuse

Description of what happened /Description des circonstances

Description and estimated cost of property damage / Description et coût estimatif des dommages matériels | Operation in progress / Opération en cours

Injured Employee's Name (if applicable) / Nom de l'employé blessé (s'il y a lieu) | Age / Âge | Occupation / Profession

Years of experience in occupation / Nombre d'années d'expérience dans la profession

Description of injury/Description de la blessure | Sex / Sexe | Nationality / Nationalité

Evacuation / Évacuation | Direct cause of injury/Cause directe de la blessure

Was training in accident prevention given to injured employee in relation to duties performed at the time of the hazardous occurrence?
L'employé blessé a-t-il reçu un entraînement en prévention des accidents relativement aux fonctions qu'il exerçait au moment de la situation hasardeuse?

yes/oui ☐ no/non ☐ Specify / Préciser

Direct causes of Hazardous Occurrence / Causes directes de la situation hasardeuse

Corrective action and date employer will implement / Mesures correctives qui seront appliquées par l'employeur et date d'entrée en vigueur

Supplementary preventative measures / Autres mesures de prévention

Name of person investigating / Nom de la personne menant l'enquête	Signature / Signature	Date / Date
Title / Titre	Telephone Number / Numéro de téléphone	
Safety & Health Committee Member or Representative's Name / Nom du membre du comité d'hygiène et de sécurité ou du représentant à l'hygiène et à la sécurité	Signature / Signature	Date / Date
Title / Titre	Telephone Number / Numéro de téléphone	
Name of person representing the Operator / Nom de la personne représentant l'exploitant	Signature / Signature	Date / Date
Title / Titre	Telephone Number / Numéro de téléphone	

(Continue on reverse if needed / Continuer au verso si nécessaire)

Lab/Trav 369 (Revised 7/87)

COPIES 1 & 2 to R.S.O., COPY 3 to the Safety and Health Committee or Representative, COPY 4 to the Employer.
COPIES 1 et 2 à A.R.S., COPIE 3 au Comité d'hygiène et de sécurité ou au représentant, COPIE 4 à l'employeur.

YEAR/ANNÉE 19__

SCHEDULE II/ANNEXE II
(SECTION 15.10/ARTICLE 15.10)

GUIDE TO COMPLETION ON OTHER SIDE/ EXPLICATIONS AU VERSO

Page ____ of/de ____

EMPLOYER'S ANNUAL HAZARDOUS OCCURRENCE REPORT

RAPPORT ANNUEL DE L'EMPLOYEUR CONCERNANT LES SITUATIONS HASARDEUSES

1-11 EMPLOYER IDENTIFICATION NUMBER / NUMERO D'IDENTIFICATION DE L'EMPLOYEUR	12-13 ACTION CODE / CODE D'ACTION	14-47 ADDRESS OF WORK PLACE / ADRESSE DU LIEU DE TRAVAIL	48-52 NUMBER OF DISABLING INJURIES / NOMBRE DE BLESSURES ENTRAINANT UNE INVALIDITÉ	53-55 NUMBER OF DEATHS / NOMBRE DE DÉCÈS	56-61 NUMBER OF MINOR INJURIES / NOMBRE DE BLESSURES LÉGÈRES	62-63 NUMBER OF OTHER HAZARDOUS OCCURRENCES / NOMBRE D'AUTRES SITUATIONS HASARDEUSES	64-67 TOTAL NUMBER OF EMPLOYEES / NOMBRE TOTAL D'EMPLOYÉS	68-73 NUMBER OF OFFICE EMPLOYEES / NOMBRE D'EMPLOYÉS DE BUREAU	74-80 TOTAL NUMBER OF HOURS WORKED / TOTAL DES HEURES TRAVAILLÉES

Lab/Trav 393 (Rev. 2/86) (APC 66)

Travail Canada
Labour Canada

If this address is incorrect please correct
Si cette adresse est inexacte, veuillez la corriger

DATE OF SUBMISSION / DATE DE PRÉSENTATION

SUBMITTING OFFICER'S NAME AND TITLE/NOM DE L'AUTEUR DU RAPPORT ET TITRE

SIGNATURE / SIGNATURE

TELEPHONE/TÉLÉPHONE

B6

APPENDIX C

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

The Workplace Hazardous Materials Information System, or WHMIS, is a national system designed to ensure that all employers obtain the information that they need to inform and train their employees properly about hazardous materials used in the workplace.

WHMIS is consistent with the worker's "right to know" what the hazards are and what needs to be done to control them in the workplace. Under WHMIS, suppliers and employers have certain responsibilities.

Suppliers must convey hazard information to purchasers in a specified manner by means of labelling on the controlled products or containers of the controlled products and by providing more detailed information concerning the controlled product in the form of a material safety data sheet (MSDS).

Employers are also required to provide their employees with hazard information received from suppliers and in respect of controlled products produced in the workplace.

Employers' Responsibilities

Labels

Employers must ensure that supplier-provided containers of controlled products are labelled with WHMIS supplier labels. For workplace processes, employers are required to furnish some form of workplace warnings such as labels, tags or markings. Although there is no specified format for workplace labelling and other forms of hazard warnings, information on the safe handling, storage and use of the controlled product and a product identifier (e.g., brand name, code name or the chemical name of the product) must be provided.

Where a controlled product at the workplace is contained in a pipe, a piping system including valves or, a process or reaction vessel, the employer must ensure that the content is clearly identified to workers through appropriate means and through worker education.

Use of Material Safety Data Sheets (MSDS)

Employers are responsible for obtaining from suppliers an MSDS for each controlled product used in their workplaces. The MSDS is to be updated at least every three years or as soon as further information related to the hazard becomes available for a material. As an important source of detailed information on controlled products, an MSDS from the product supplier or the employer is to be readily accessible to employees at each work site and supplied or made accessible to safety and health committees or representatives.

Employee Education and Training

Besides disclosing to workers hazard information on controlled products, employers are to ensure that instruction is provided for employees who handle, are exposed to, or are likely to handle or be exposed to hazardous materials. This should result in the employees becoming more aware of and better able to apply hazard information to ensure their safety and health.

The instruction should include a description of all the mandatory and performance-oriented aspects of WHMIS and of the responsibilities of the employer and employees.

Employers are required to consult with safety and health committees or representatives, where they exist, during the development of education and training activities with respect to exposure to hazardous materials. Employers are also required to review the information and training provided to workers concerning hazardous materials in consultation with the safety and health committees or representatives at least annually, or more frequently if new hazard information becomes available or if required by a change of conditions.

APPENDIX D

PERSONAL PROTECTIVE EQUIPMENT PROGRAM CHECKLIST

The Canadian Centre for Occupational Health and Safety has published the following checklist to assist employers in developing a Personal Protective Equipment Program.

Personal Protective Equipment

- Is there a policy or practice governing the proper use and conservation of PPE?
- Is proper PPE made available to workers?
  - Are these devices regularly maintained and in good condition?
  - Are they being used as prescribed?
  - Is the wearing of PPE when appropriate rigorously enforced?
  - Are proper storage and cleaning facilities provided?
- Are workers fitted properly for PPE?
- Are PPE standards/rules and procedures for specific jobs defined in writing?
- Is there provision for workers to have input into identifying the needs for, and making the selection of, PPE?
- Are workers properly instructed in the need for and use of protective equipment and is a record made of that instruction?
- Are supervisors required to check PPE to ensure that it is in serviceable condition?
- Are workers required to return used or damaged equipment to receive a reissue?

Personal Protective Equipment Record Keeping

- Is the usage of PPE recorded?
  - Is an analysis made of usage?
  - Is there a record system to ensure proper cleaning and replacement of parts?

Enforcement of Rules and Procedures

- Have the rules, procedures and disciplinary format been discussed with and made acceptable to the joint health and safety committee, safety and health representatives?
- Are commendations recorded for exemplary use of PPE?
- Is recognition given/sought when PPE has prevented or minimized injury or illness?
- Is there an established procedure that enables disciplinary action for violation of PPE rules and procedures?

Program Effectiveness Evaluated

- Is there an established procedure to enable senior management to evaluate the consistency of enforcement of the PPE program?

APPENDIX E

EMERGENCY PLAN

Introduction

Section 18.9 of the OSH Regulations requires employers to prepare an emergency procedures plan for each of the following types of circumstances:

- death of an employee;
- missing person;
- disabling injury to an employee;
- the implementation of emergency rescue, revival or evacuation procedures;
- fire or explosion that threatens the safety or health of an employee;
- the free fall of an elevating device that rendered the elevating device unsafe for use by an employee;
- an accidental accumulation, spill or leak of a dangerous substance;
- the loss of or damage to support craft;
- if any person commits or threatens to commit an act that is likely to be hazardous to the safety or health of the employer or any employee;
- an alternate means of evacuation from a work site when the usual means is not appropriate; and
- in the event of failure of the primary lighting system.

However, you are reminded that in accordance with the Guidance Notes for Canada Oil and Gas Drilling Regulations document, response plans for major emergencies are to be included in the application for Drilling Program Authorization.

Specific Factors

The requirement to prepare emergency plans for hazardous occurrences applies to geophysical, drilling, and production operations.

When preparing these plans, the following factors should be considered:

1. Alert Procedures

Emergency plans should include alert procedures based upon environmental criteria, the purpose of which is to bring company management to a higher state of preparedness in the face of a potential emergency. For offshore operations, these criteria may be based upon sea state, forecast weather conditions, pack ice or iceberg encroachment or other problems aggravated by environmental conditions.

2. Provisions for Common Response/Alert Plans, Flight Following and Ice Management

Where more than one operator is active in a particular area, the adoption of common response/alert plans, flight following, and ice management services are required. This program of joint emergency preparedness should be complemented by operator equipment resource sharing arrangements.

Operators should institute cooperative operating arrangements on a joint basis as follows:

a) Operators shall put in place a joint Alert and Emergency Response Plan for the purpose of coordinating a response of all operators to any alert or emergency.

b) All operators are to put in place a plan for the sharing of personnel and major items of equipment, including vessels, helicopters and drilling units to assist in the response to an emergency.

c) All operators are to maintain a common flight watch at all times that a helicopter is in the air and, in addition, at all times that an alert or emergency has been declared. This watch will also plot the location, speed and heading of all vessels.

3. Elements of Emergency Plans

The following elements should also be described:

a) responsibilities of key personnel;

b) first aid and medical support facilities;

c) primary and secondary means of evacuation;

d) weather limitations of evacuation procedures;

e) availability of on-board firefighting equipment;

f) procedures for locating downed aircraft (description of flight tracking);

g) person overboard and recovery procedures;

h) communication facilities between rig, vessels, aircraft and other units in the area;

i) summary of external response procedures in the event of loss of well control;

j) cooperative arrangements for search and rescue, ice weather services, and equipment sharing;

k) precautions for hazards unique to the drill site, e.g. ice management and vessel collision avoidance procedures;

l) vessels and aircraft under contract;

APPENDIX F

MEDICAL PREPAREDNESS

Part XVII of the OSH Regulations, with its four schedules, set out the minimum requirements for medical personnel and supplies based on the number of personnel at a workplace. The majority of exploration and production sites on Frontier Lands are remote from centres of population. The employer must therefore consider the specific circumstances of the workplace and decide whether additional medical resources and preparedness are necessary based on the advice of his medical consultant. As an example, the measures appropriate for an offshore drilling site are described below.

MODU First Aid Team

It is important that appropriate personnel aboard Mobile Offshore Drilling Units be fully prepared in the event of a medical emergency.

In a MODU emergency or disaster which seriously injures several workers, the rig medic will require competent assistants to provide appropriate care. Should the medic himself be one of the casualties, it is even more important that others be properly prepared to assume his responsibilities. Companies must therefore ensure that the degrees of training, practising and equipping meet the requirements of the MODU's emergency response plan.

The MODU emergency response plan should designate eight personnel to make up the first aid team assigned to assist the medic. Two of the team will be appointed as first and second alternative leaders in the event that the medic is incapacitated. The rig medic is responsible for the training and exercising of the team so that each member is familiar with the emergency response plan. This plan will identify the main lighting, corridors, communications and other equipment to be used by the team; it will also specify the emergency stations and alternatives for the team.

Team members should have St. John Ambulance advanced first aid training (5 day course) or the equivalent, as well as CPR training.

It is uncommon for a MODU crew to experience a serious accident, especially one in which more than one casualty requires care. Consequently, medical response exercises often operate on the faulty assumption that the medic is the only person likely to be involved in patient care. This preconception can be highly dangerous if large-scale emergencies occur or if the medic is injured. Therefore, the operator should hold exercises which fully test both the response plan and the competence of the first aid team. Such exercises might, for example, simulate an emergency which involves at least two seriously injured casualties and a complicating operational problem such as a fire or explosion.

The full response plan will involve management, communications personnel, and rescue and evacuation personnel. Shore base or main base camp personnel should also be involved in the exercise, especially if it simulates a medical evacuation. In

addition, the physician responsible for onshore medical support should participate at least annually in an exercise which evaluates the preparedness of the team.

Standby Vessels First Aid Training

The standby/supply vessels also have an important role to play in a medical emergency. To ensure a competent medical response to emergencies:

1. Crew should be trained for large scale emergencies involving multiple casualties; they should be familiar with the principles of triage.

2. Refresher training should be conducted at least every two years - preferably every year - on the use of equipment in multiple casualty emergencies.

3. Ongoing formal First Aid training must be held to keep certificates current.

4. Three-quarters of the crew (75%) or more should have standard first aid certificates.

5. At least three crew members should have advanced first aid certificates. One of them is to be designated the Senior First Aid person and be trained in the principles of triage and treatment of hypothermia.

APPENDIX G

SEISMIC VESSELS

The energy authority and Canadian Coast Guard share responsibility for the safety and health of employees on seismic vessels. Employees reporting to the master and who are involved with the functioning of the ship are covered by the marine OSH Regulations. The Oil and Gas OSH Regulations apply to the "seismic or geophysical crew", that is, employees conducting a "geophysical operation" as defined in the draft Canada Oil and Gas Geophysical Regulations.

The draft Canada Oil and Gas Geophysical Regulations require that an operator obtain a Geophysical Program Authorization (GPA) from the NEB prior to undertaking such work. The informational requirements on page 3 of these guidelines should be submitted with the application for GPA. In most cases, the seismic vessel will be inspected by a NEB safety officer prior to commencement of geophysical operations to ensure compliance with occupational safety and health requirements. This inspection will be arranged with the operator when the ship is in harbour.

In general, the Canada Labour Code requires the establishment of a safety and health committee for worksites having more than twenty employees. For vessels conducting seismic operations, it is recommended that a safety committee be formed even though it is not a legal requirement for a marine vessel. The committee should include members from both the marine and geophysical crew. In any event, if a safety committee is not established, the employer should ensure that both the marine crew and geophysical crew have a safety representative.

All geophysical related accidents on seismic vessels should be reported to the NEB and investigated by the master and/or a competent person who is familiar with the type of operation being performed at the time of the accident.

The geophysical crew should be suitably trained in the use of personnel safety equipment and procedures and should participate in all safety drills conducted on the vessel. Apart from the usual technical training necessary for geophysical crews, adequate training in basic marine survival is also necessary. Offshore survival courses have been established in Halifax, St. John's and Vancouver (for Beaufort operations). It is important that not less than one-half of the geophysical personnel have completed the Marine Emergency Duties A-1 course or better.